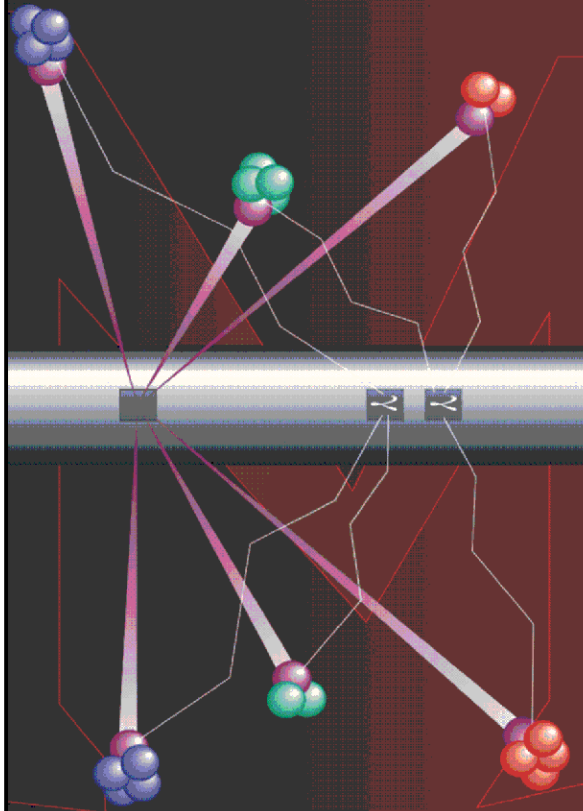


Pulsed Neutron Formation Evaluation



NEO Neutron Emulated Openhole

COMPANY LARAMIE ENERGY

WELL GUNDERSON BCU 20-07E

FIELD VEGA

COUNTY MESA STATE COLORADO

LOCATION:

SEE REMARKS SECTION

SEC 20 TWP 9S RGE 93W

ELEVATIONS:

KB 7176.0 FT DF 7175.0 FT GL 7146.0 FT

DATE 27-AUG-2017 ECC 28178-01

IN MAKING INTERPRETATIONS OF LOGS OUR EMPLOYEES WILL GIVE THE CUSTOMER THE BENEFIT OF THEIR BEST JUDGEMENT. BUT SINCE ALL INTERPRETATIONS ARE OPINIONS BASED ON INFERENCES FROM ELECTRICAL OR OTHER MEASUREMENTS, WE CANNOT, AND WE DO NOT GUARANTEE THE ACCURACY OR CORRECTNESS OF ANY INTERPRETATION. WE SHALL NOT BE LIABLE OR RESPONSIBLE FOR ANY LOSS, COST, DAMAGES, OR EXPENSES WHATSOEVER INCURRED OR SUSTAINED BY THE CUSTOMER RESULTING FROM ANY INTERPRETATION MADE BY ANY OF OUR EMPLOYEES.

COMPUTATION PARAMETERS

COMPUTATION	LOGS USED: <u>RPM-C</u>		PROGRAM: <u>NEO</u>
	CENTER: <u>CALGARY GEOSCIENCE</u>	LOG ANALYST: <u>A. KOTOV</u>	DATE: <u>30-AUG-2017</u>
FIELD DATA	LOCATION: <u>WOODWARD</u>	ENGINEER: <u>S.YASSA/US126642</u>	DATE: <u>27-AUG-2017</u>

FROM	TO								
<u>2284 FT</u>	<u>7849 FT</u>								

REMARKS

LOCATION:
SHL: LAT:39.266783N;LONG:107.795281W
BHL: LAT:39.265114N;LONG:107.788397W

TRAINING WELL: GUNDERSON 20-04W

ANY ERRORS IN THE TRAINING WELL OPEN HOLE DATA CAN PERPETUATE TROUGH AS AN ERROR IN THE EMULATED RESULTS.

BONG LOG IS DEPTH REFERENCE LOG

NEO RESULTS FOR GUNDERSON BCU 20-07E (G-SAND)

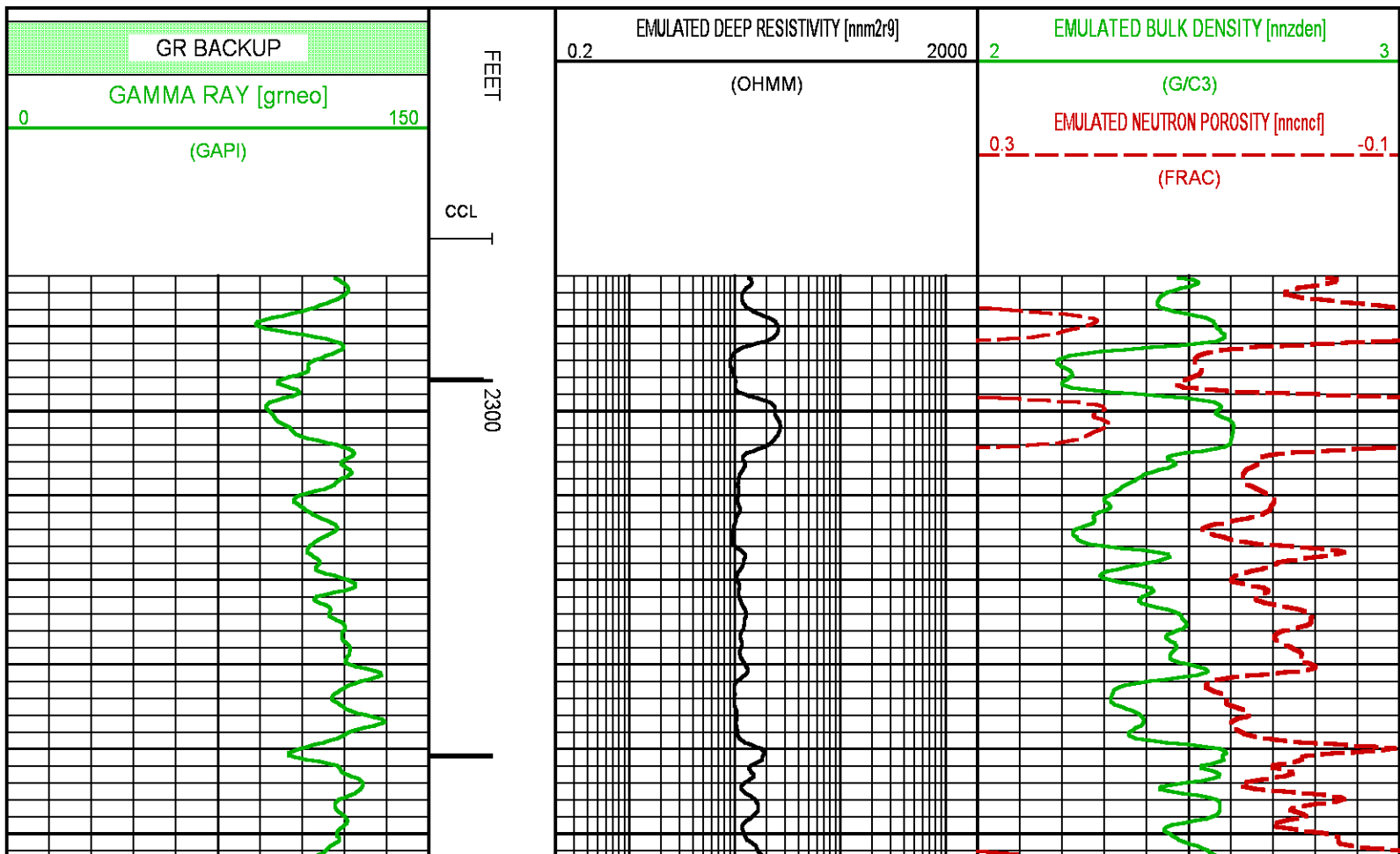
ECLIPS ECPLLOT from ECLIPS 7.0 WFM 5.0.7343.1 Sun 02/07/2016 16:48:51.73

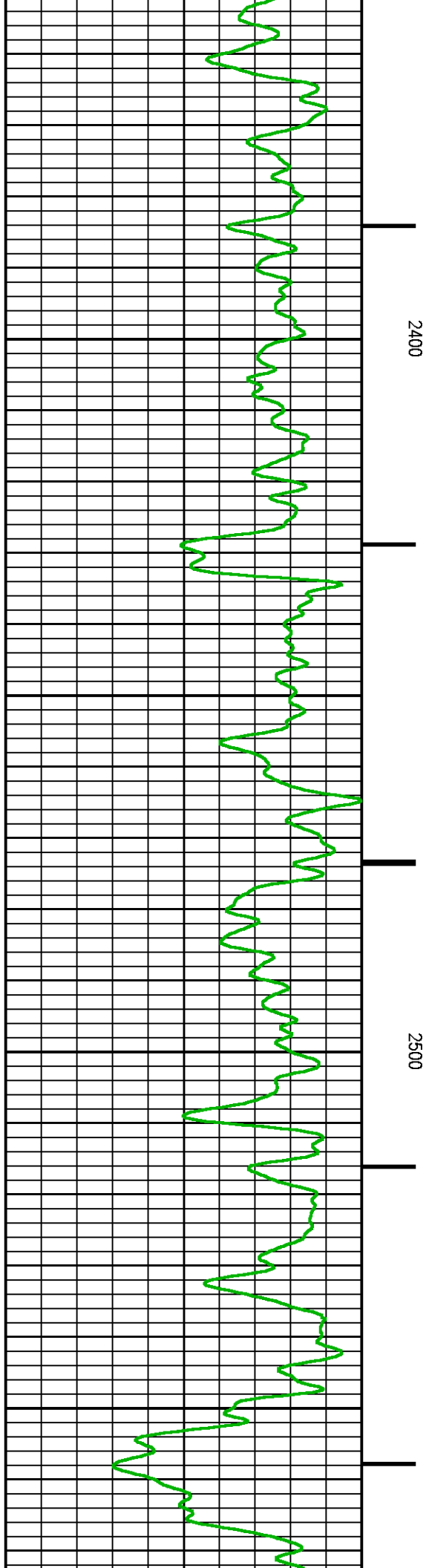
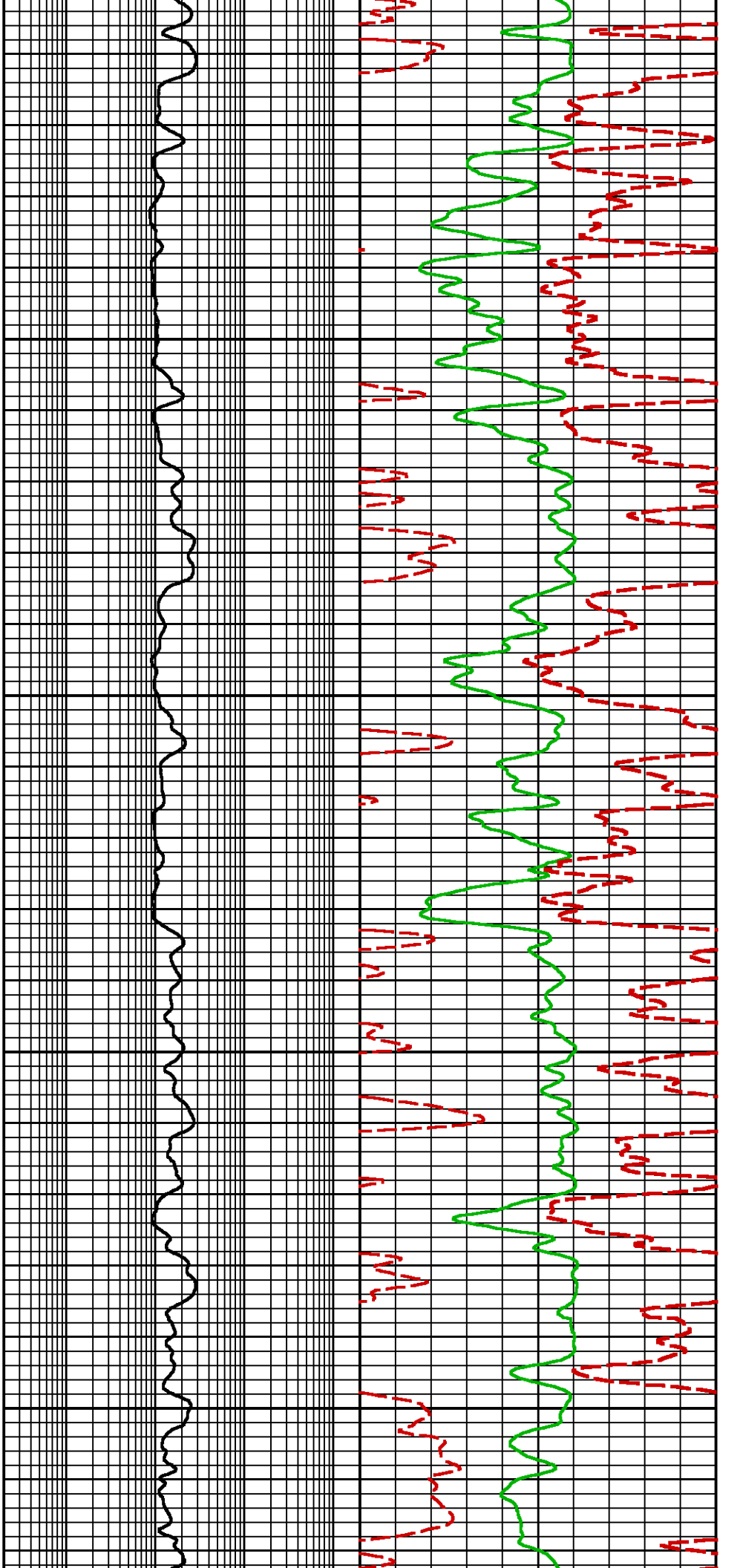
Plotted: Wed Aug 30 13:33:48 2017

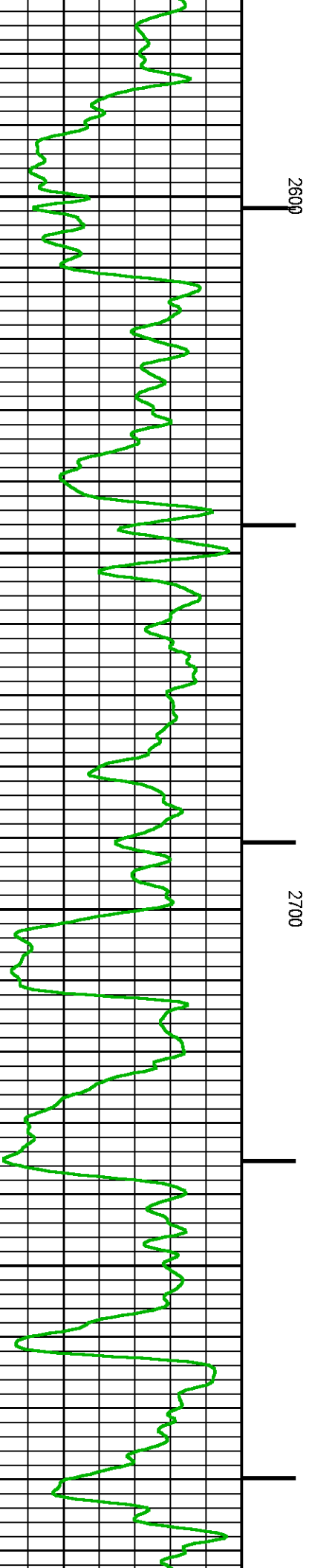
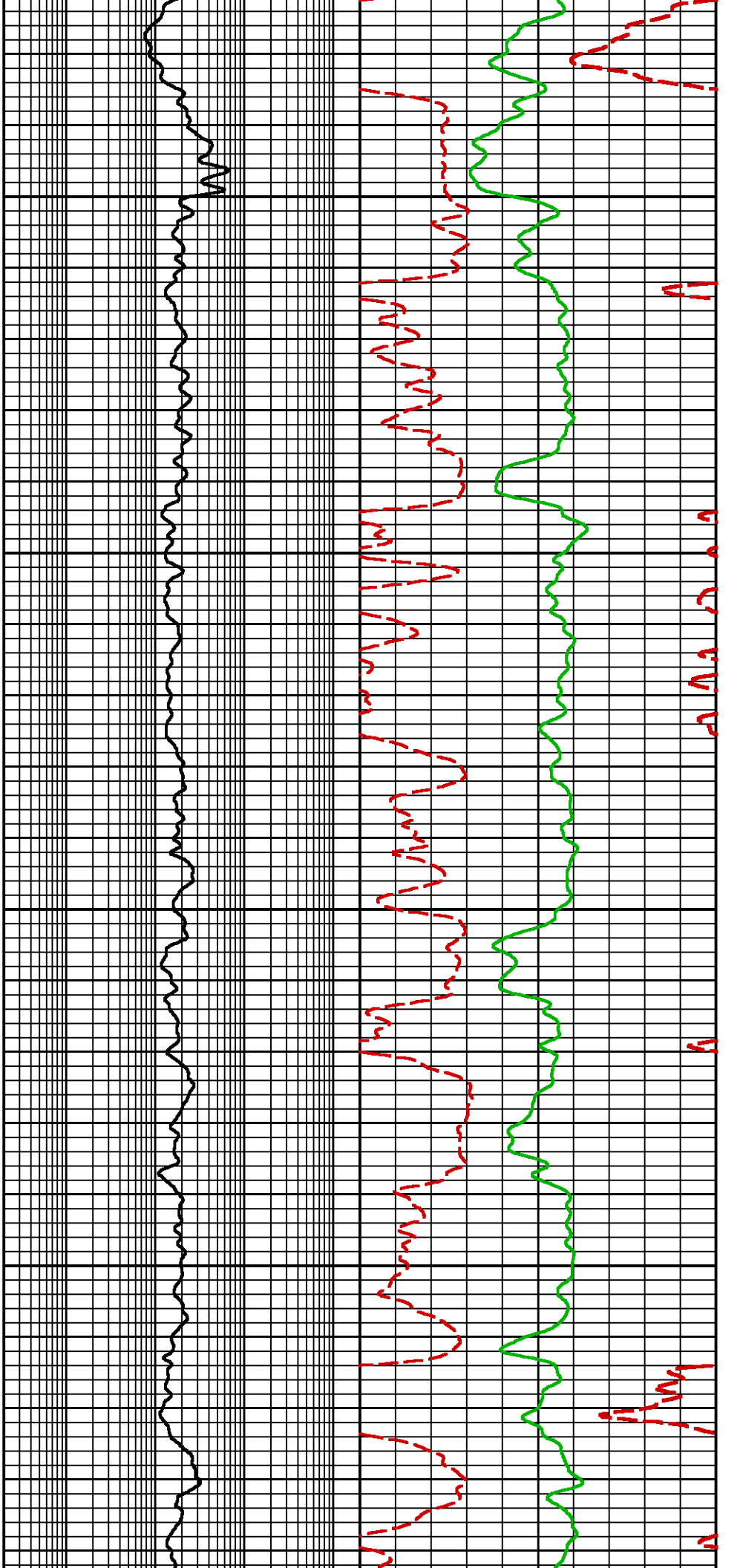
CURVE MEASURE POINT OFFSET

CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
CCL	0.00	NNCNC	0.00	NNZDEN	0.00		
GRNEO	0.00	NNM2R9	0.00				

Project : NA
User : kotoale
Presentation : BHI1F65XZ1:D:\Ape_Projects\GUNDERSON_20_07E_NEO\NEO_PRESENTATION_LARAMIE_G-Sand.pdf [5"/100' Scale]
Plot Interval : 2284.25 - 2945 Feet
Data File 1 : F1 : BHI1F65XZ1:D:\Ape_Projects\GUNDERSON_20_07E_NEO\Merged_Set_Final.xtf
Created On : N/A
Company : LARAMIE ENERGY
Well : GUNDERSON BCU 20-07E
Field : VEGA
File Interval : 2284.25 - 7849.25 Feet
OCT : NA

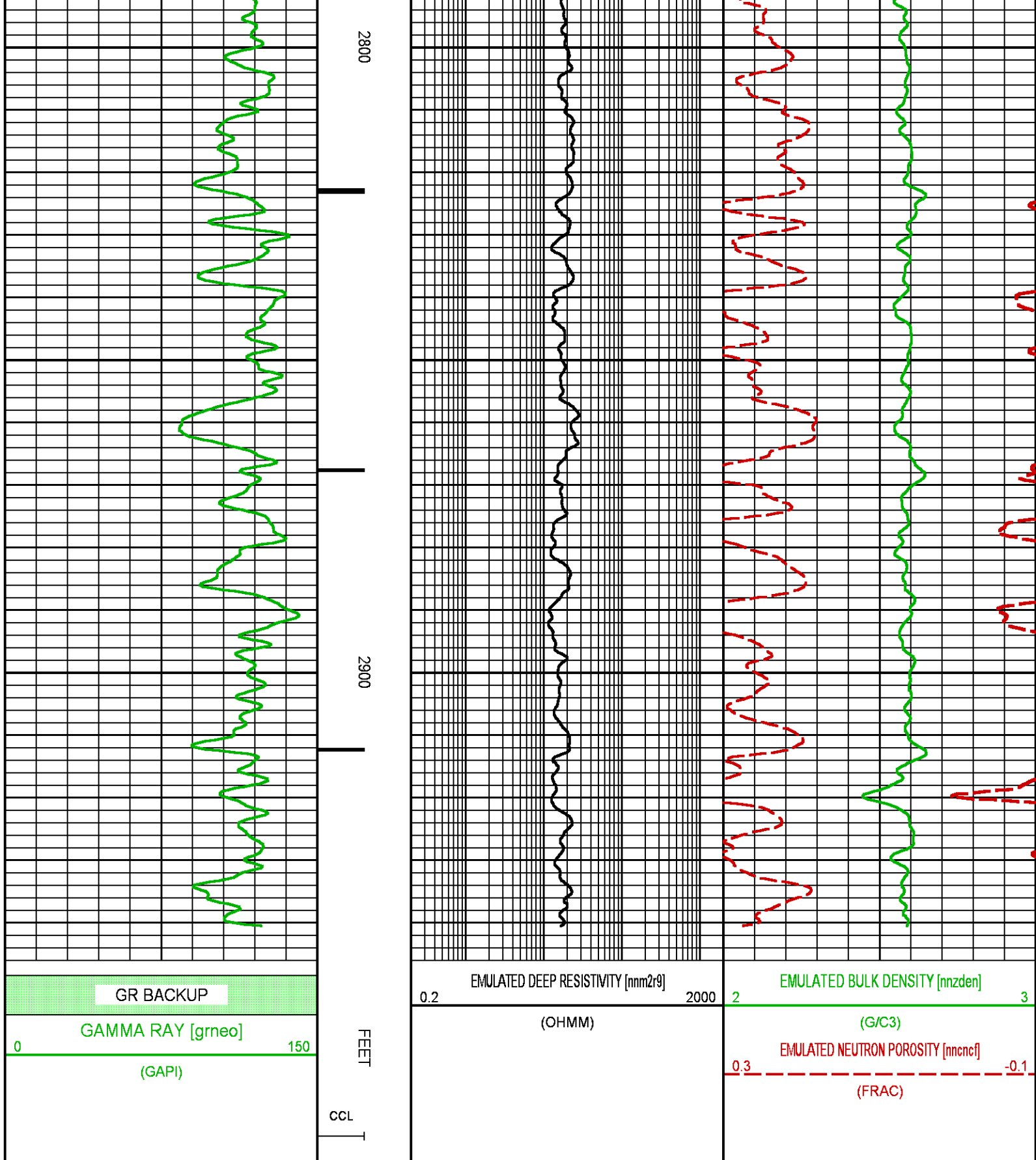






2600

2700



NEO RESULTS FOR GUNDERSON BCU 20-07E (MAIN)

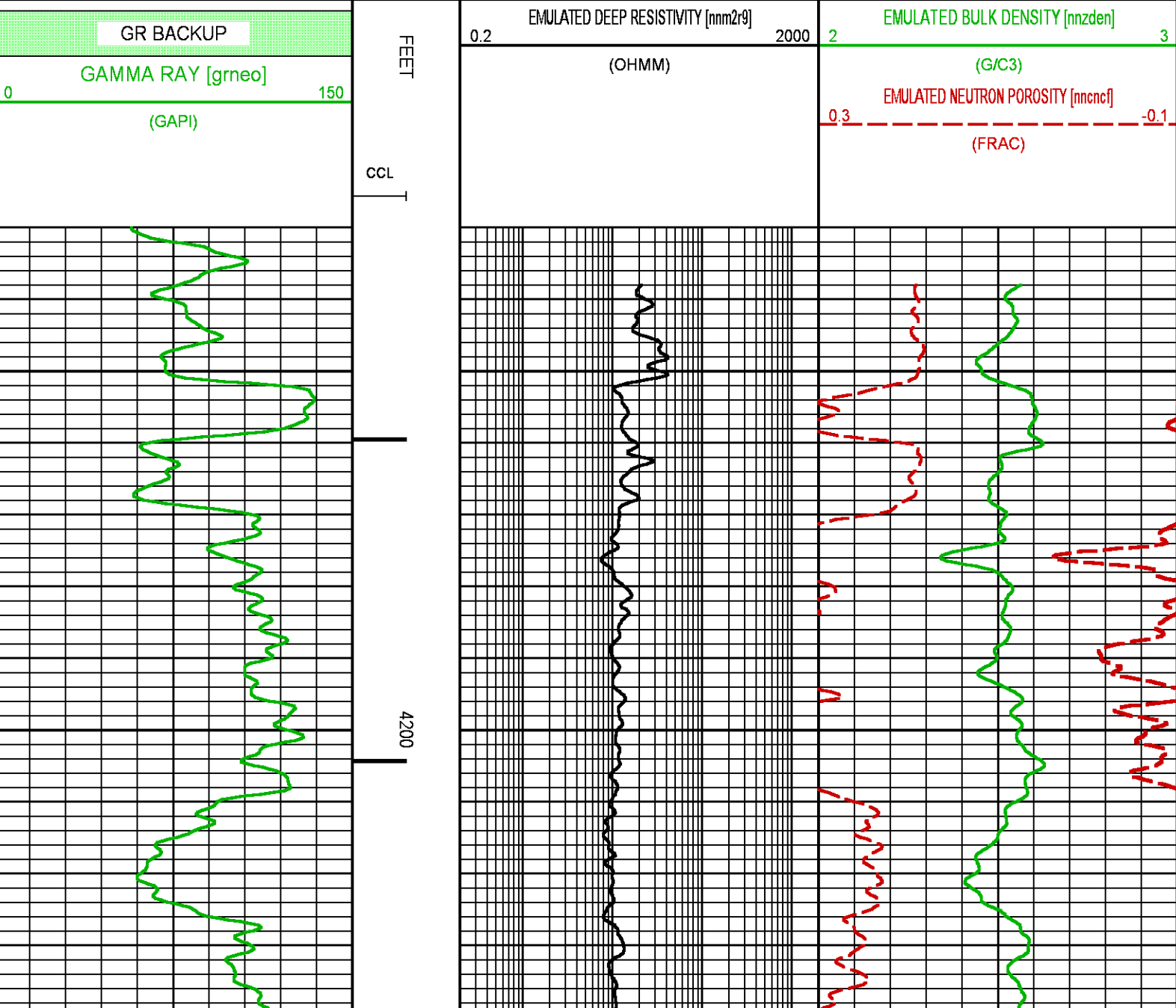
Plotted: Wed Aug 30 13:33:46 2017

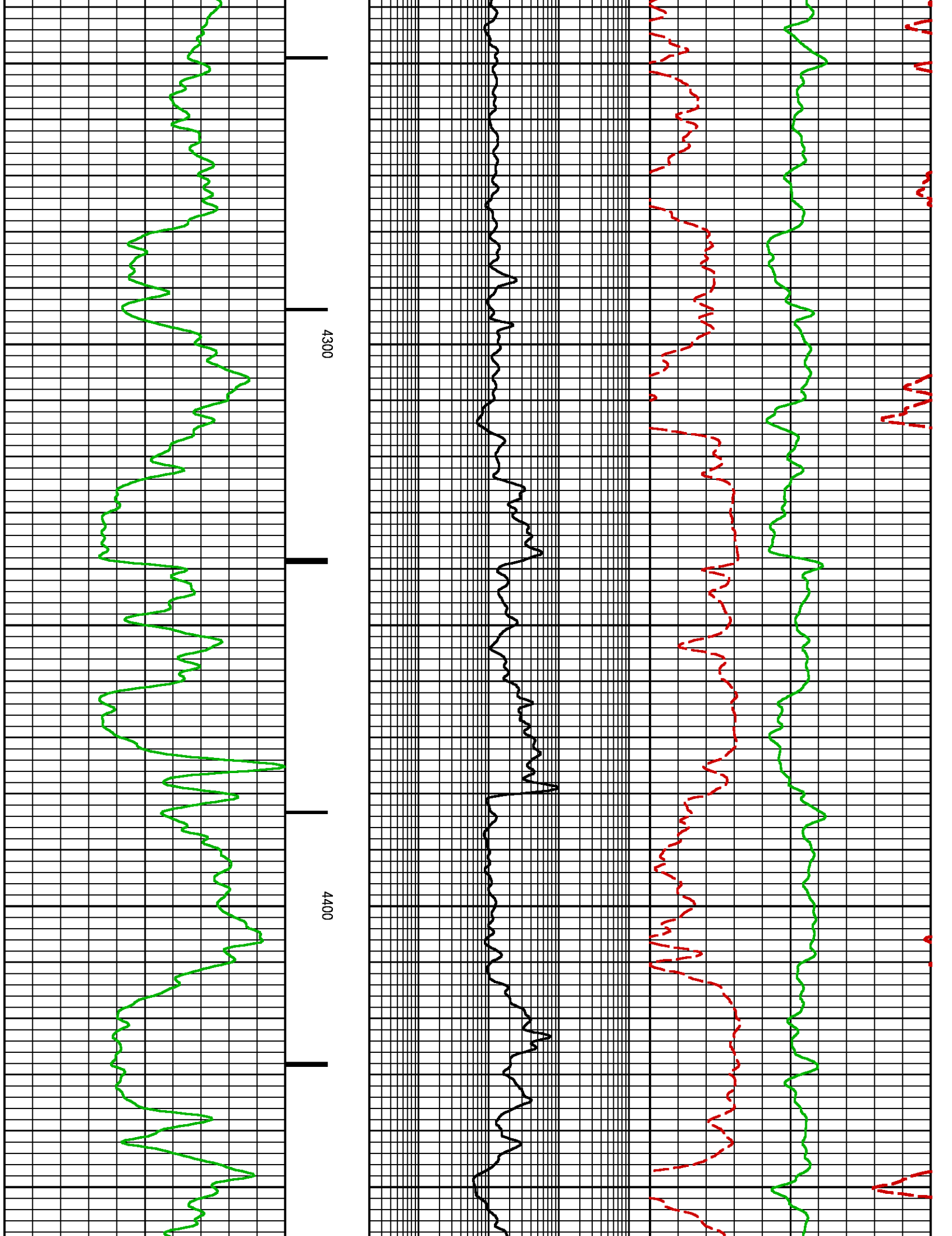
CURVE MEASURE POINT OFFSET

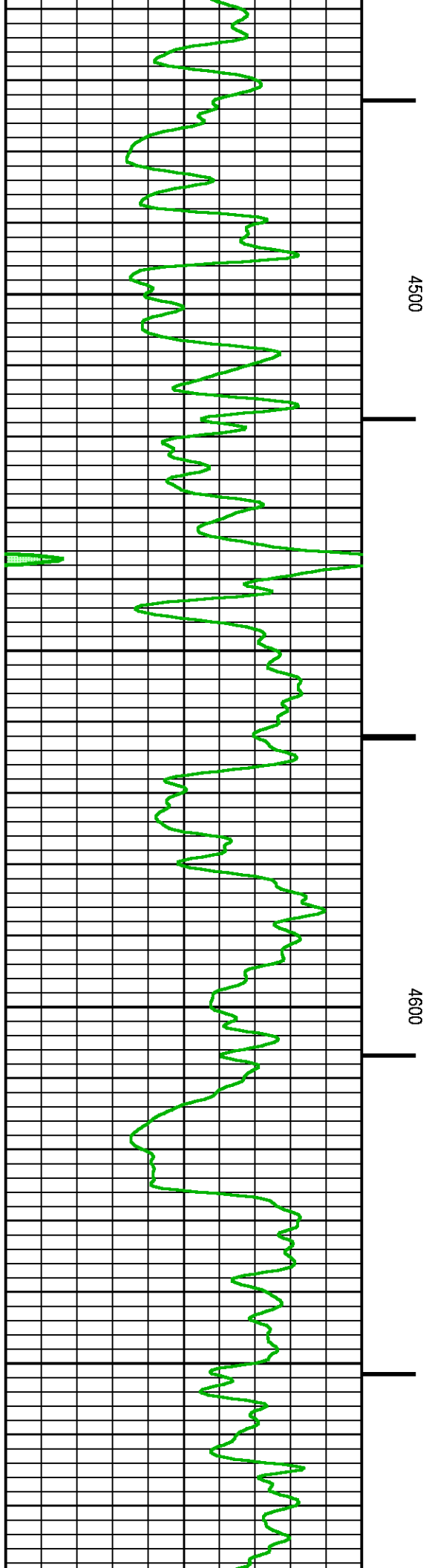
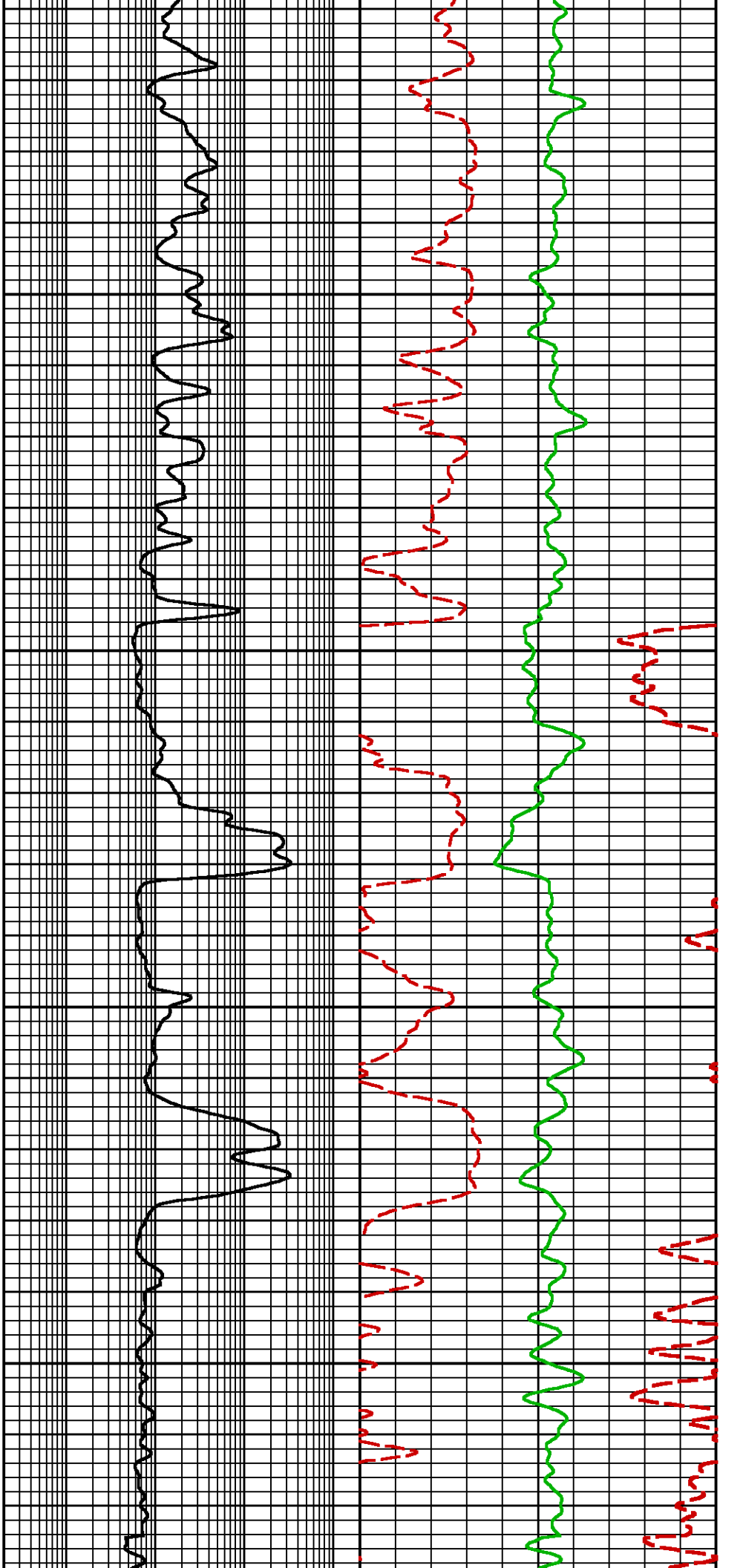
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
CCL	0.00	NNCNCf	0.00	NNZDEN	0.00		
GRNEO	0.00	NNM2R9	0.00				

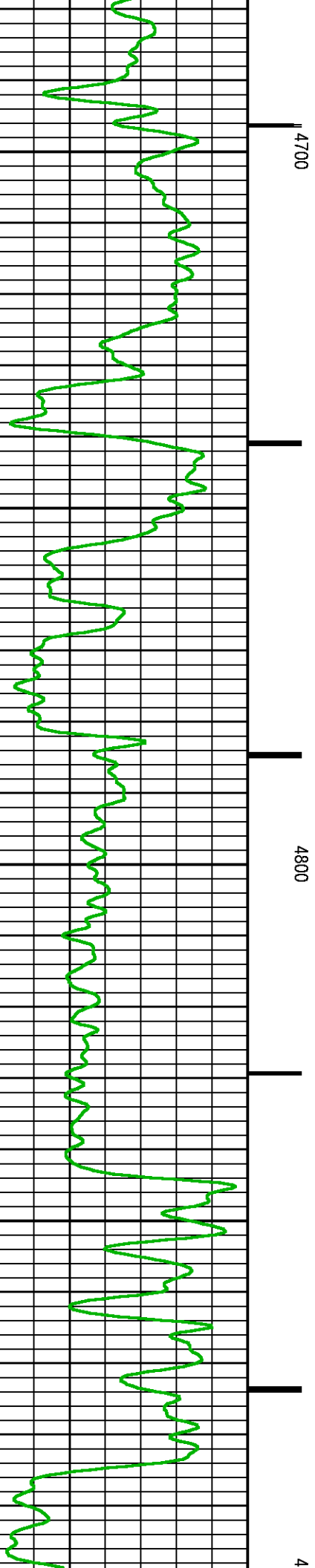
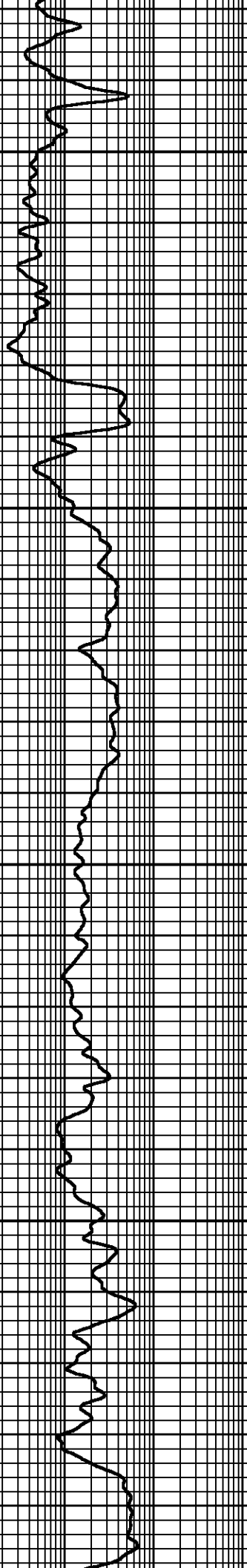
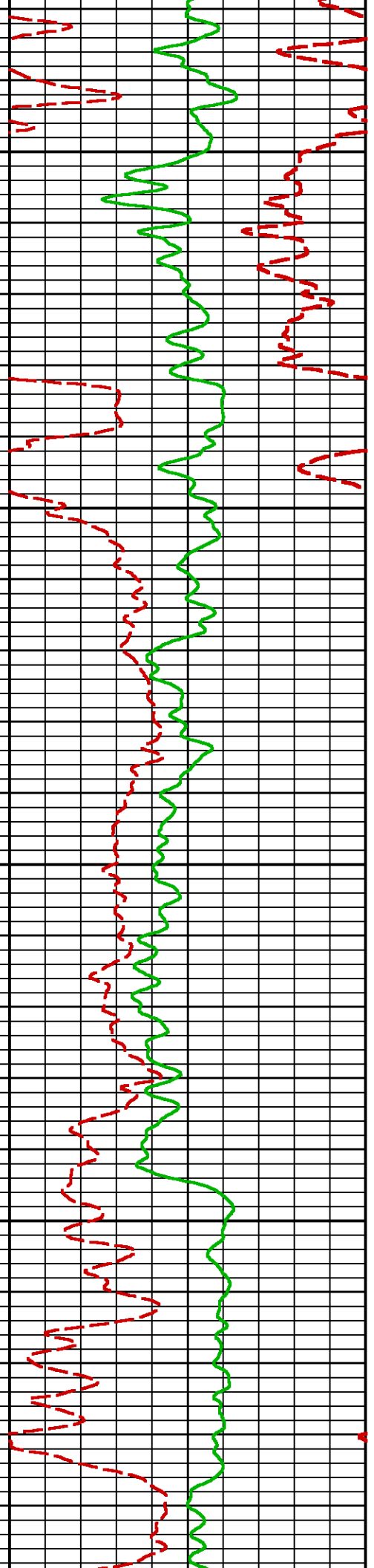
Project : NA
User : kotoale
Presentation : BHI1F65XZ1:D:\Ape_Projects\GUNDERSON_20_07E_NEO\NEO_PRESENTATION_LARAMIE_MAIN.pdf [5"/100" Scale]
Plot Interval : 4130 - 7849.25 Feet

Data File 1 : F1 : BHI1F65XZ1:D:\Ape_Projects\GUNDERSON_20_07E_NEO\Merged_Set_Final.xtf
Created On : N/A
Company : LARAMIE ENERGY
Well : GUNDERSON BCU 20-07E
Field : VEGA
File Interval : 2284.25 - 7849.25 Feet
OCT : NA





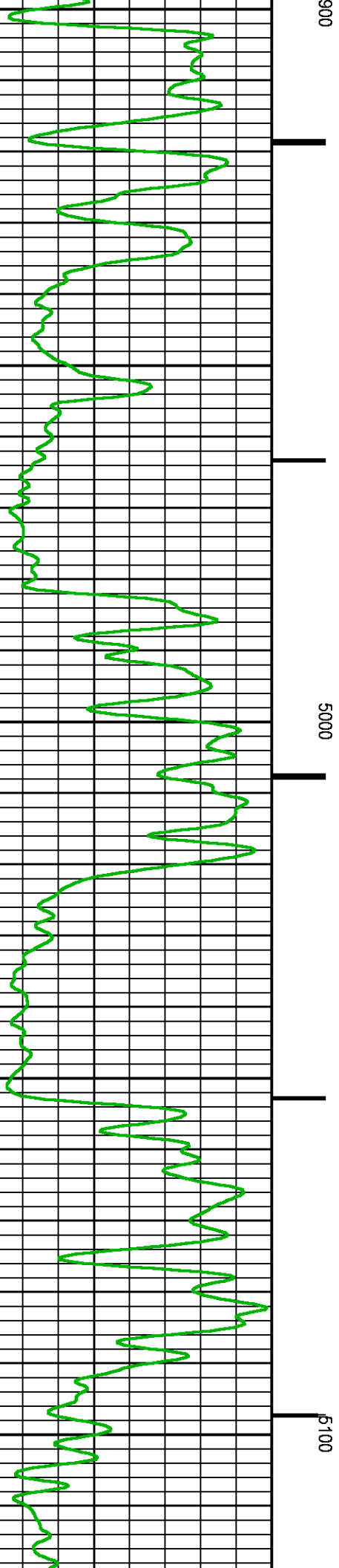
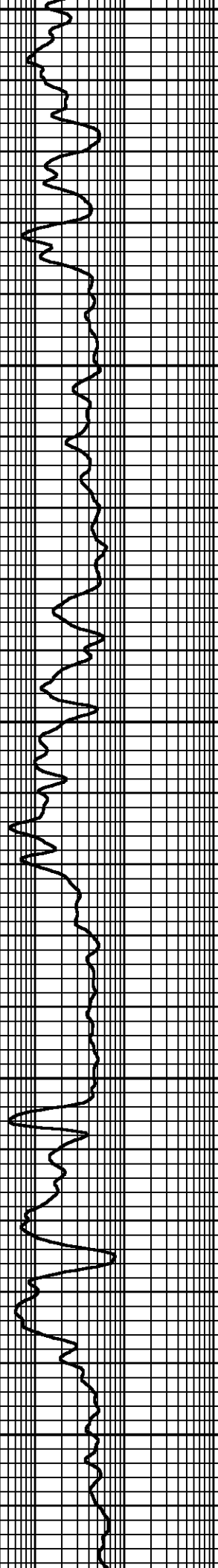
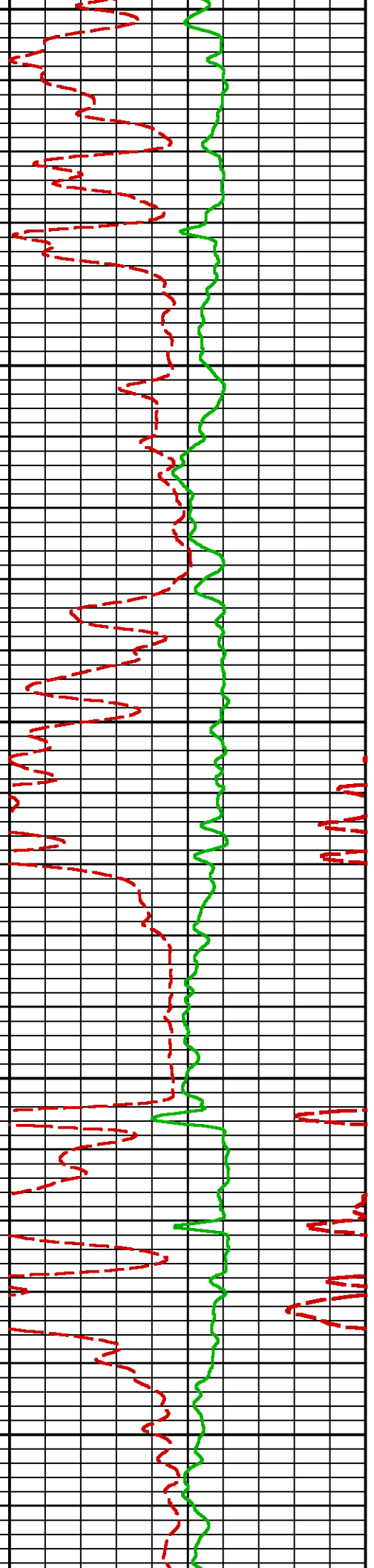


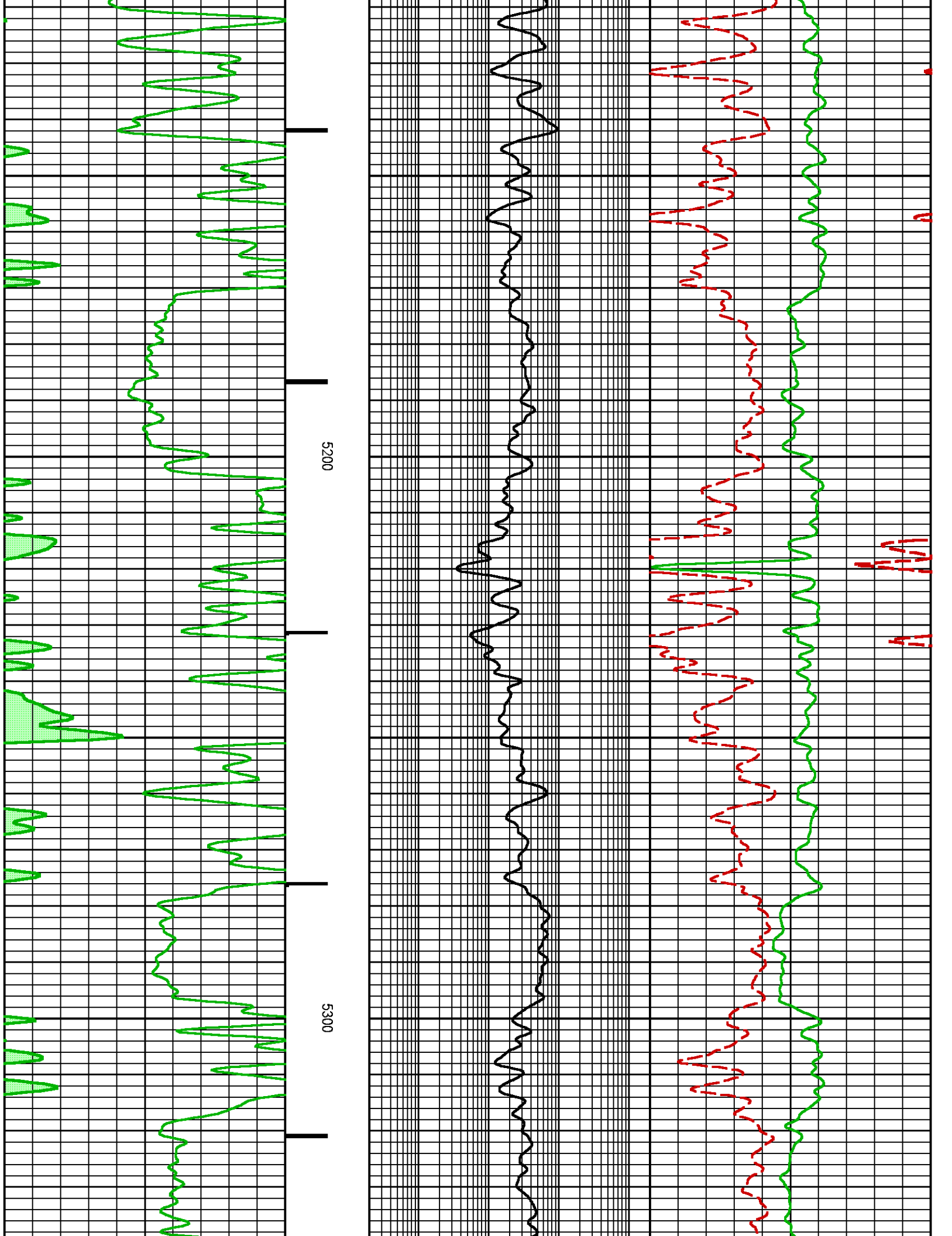


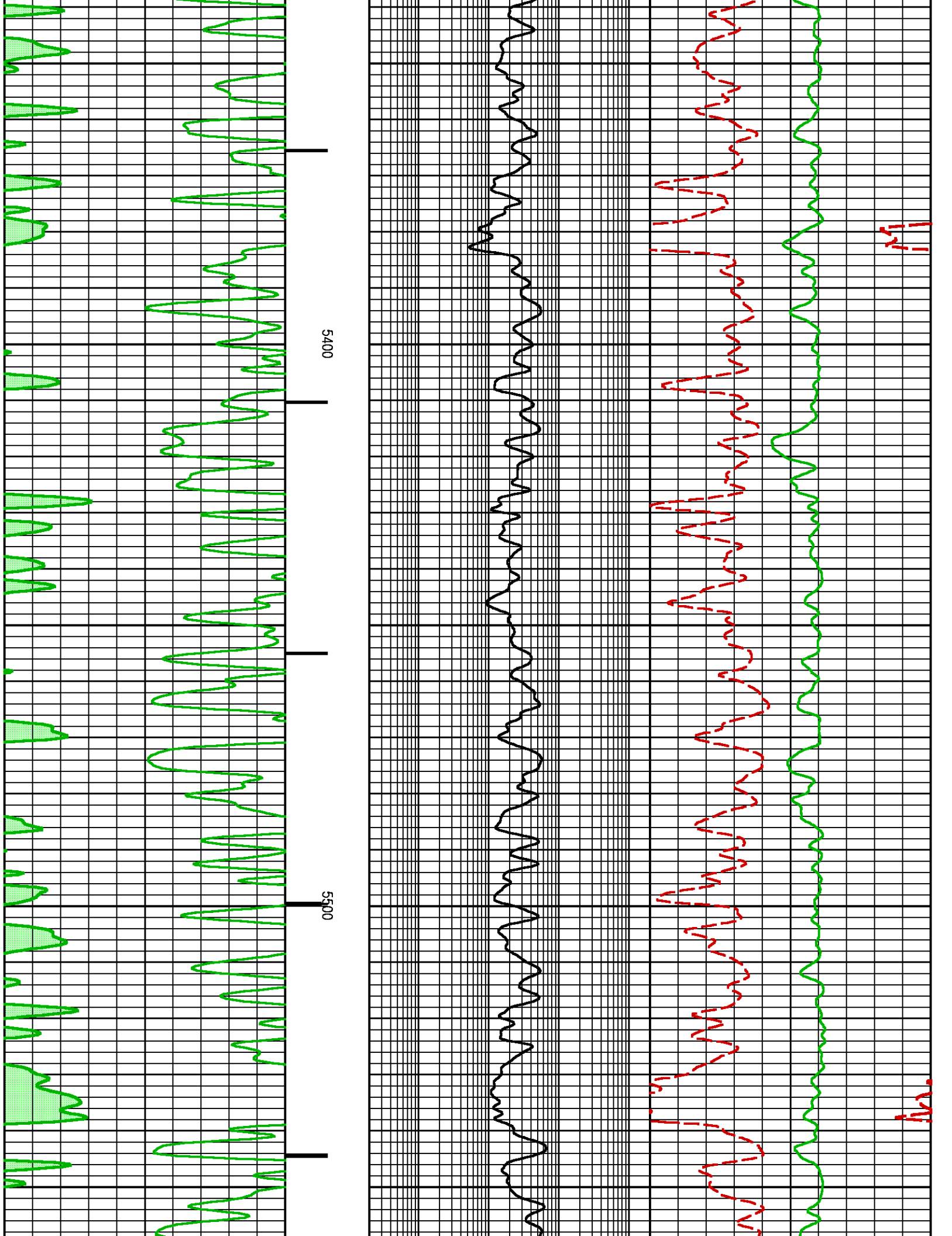
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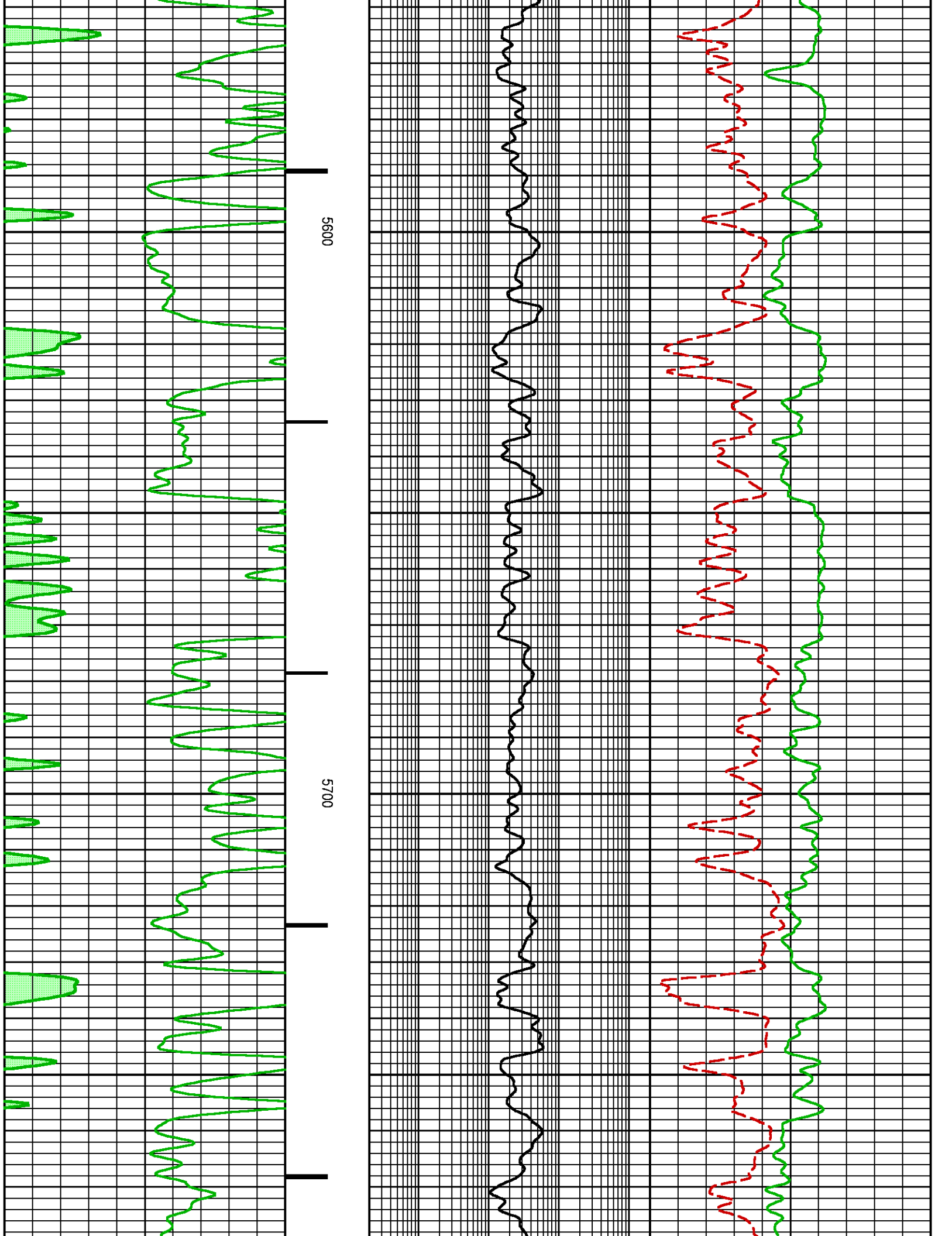
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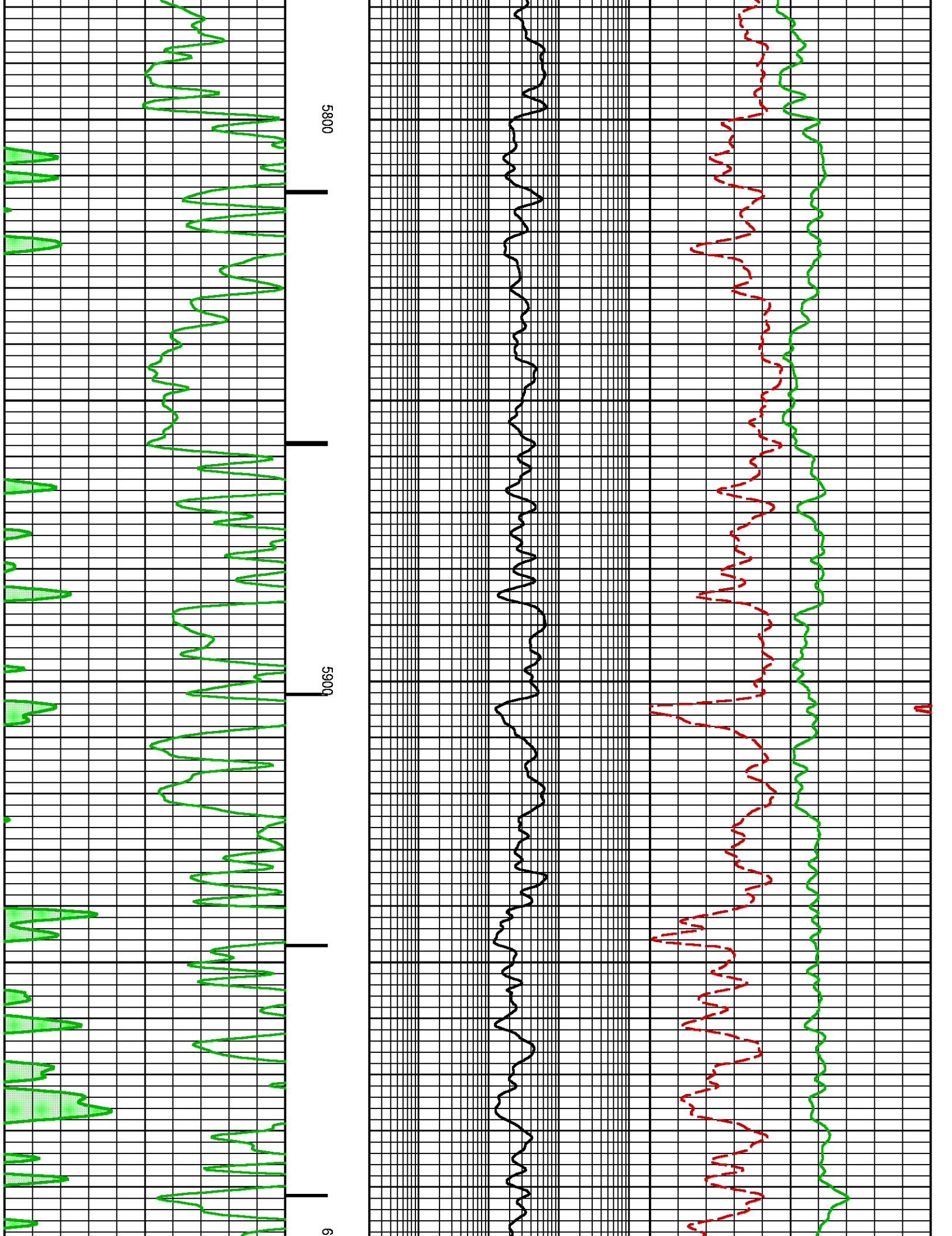
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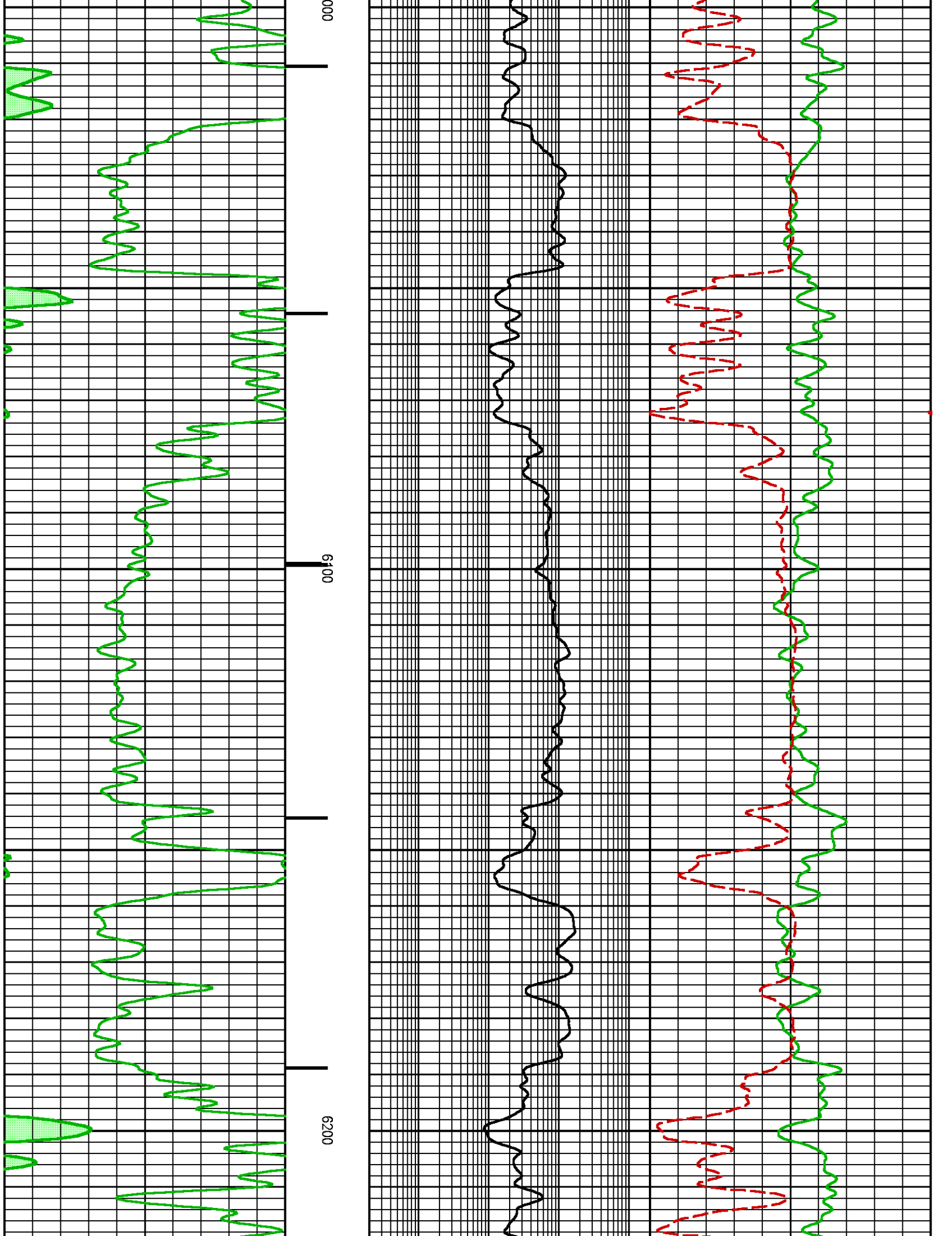


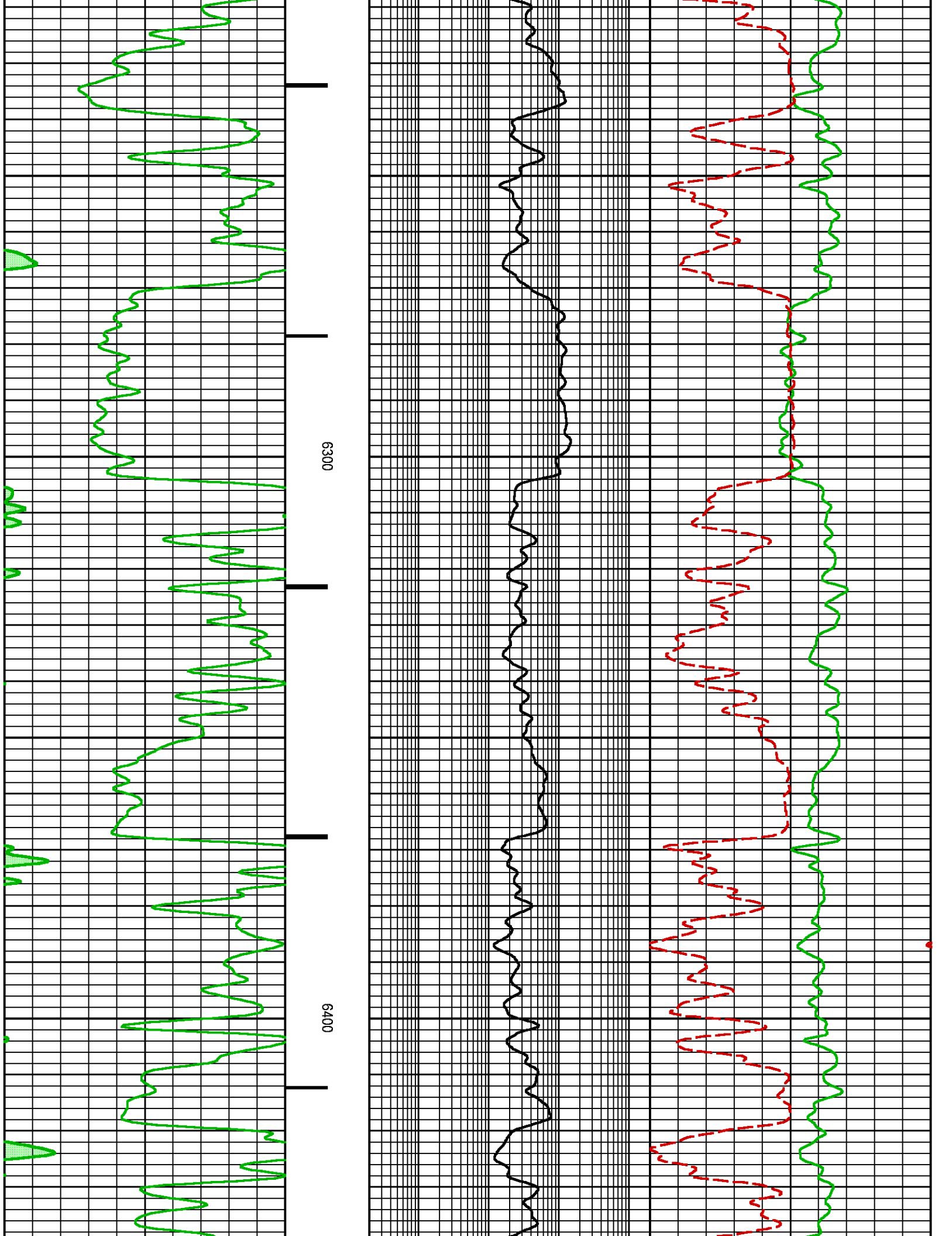


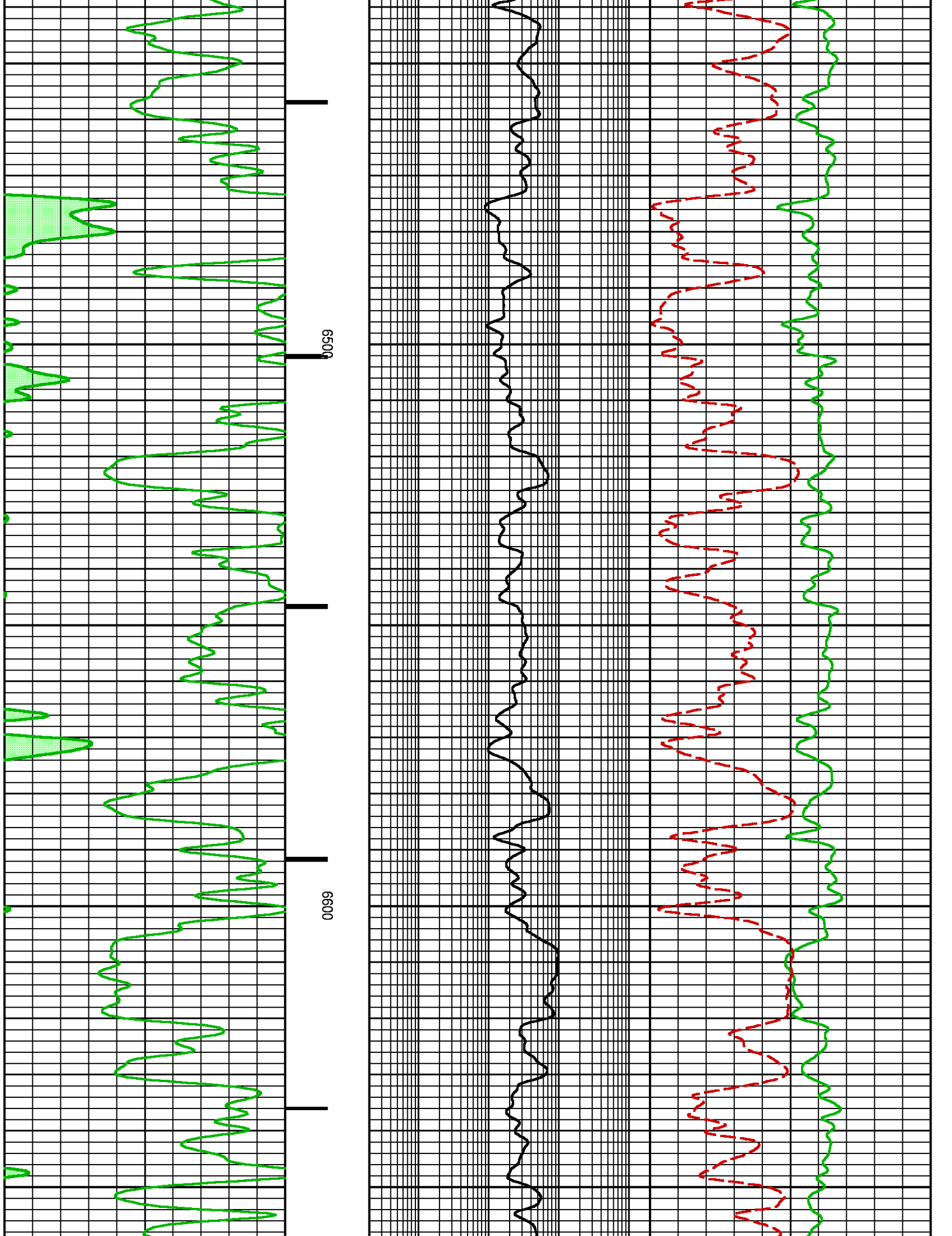


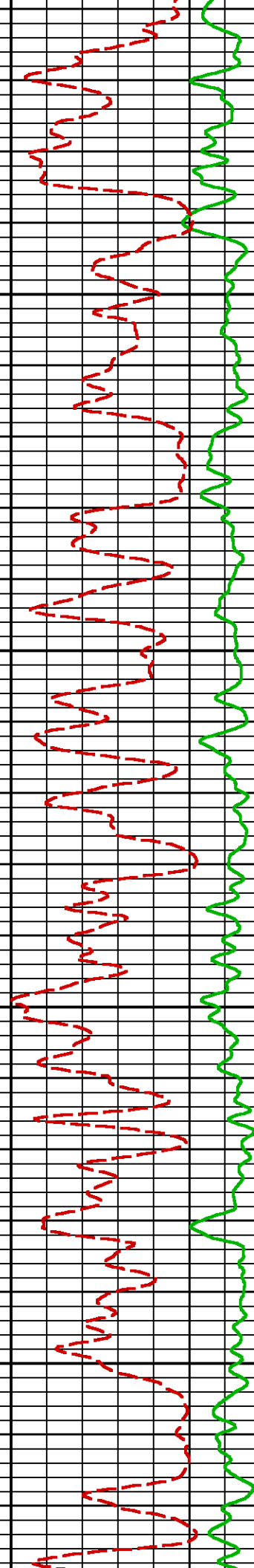
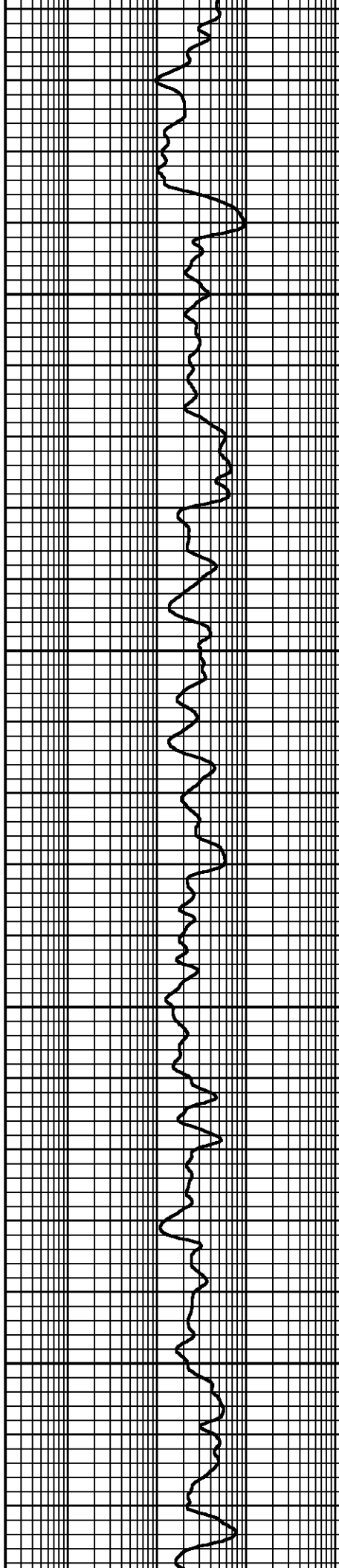
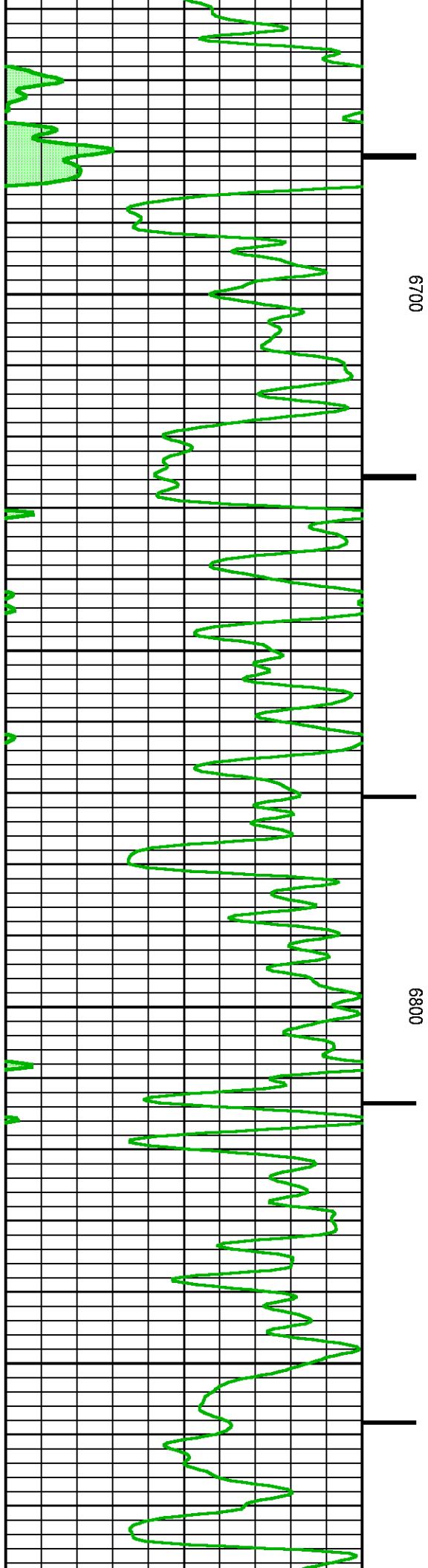


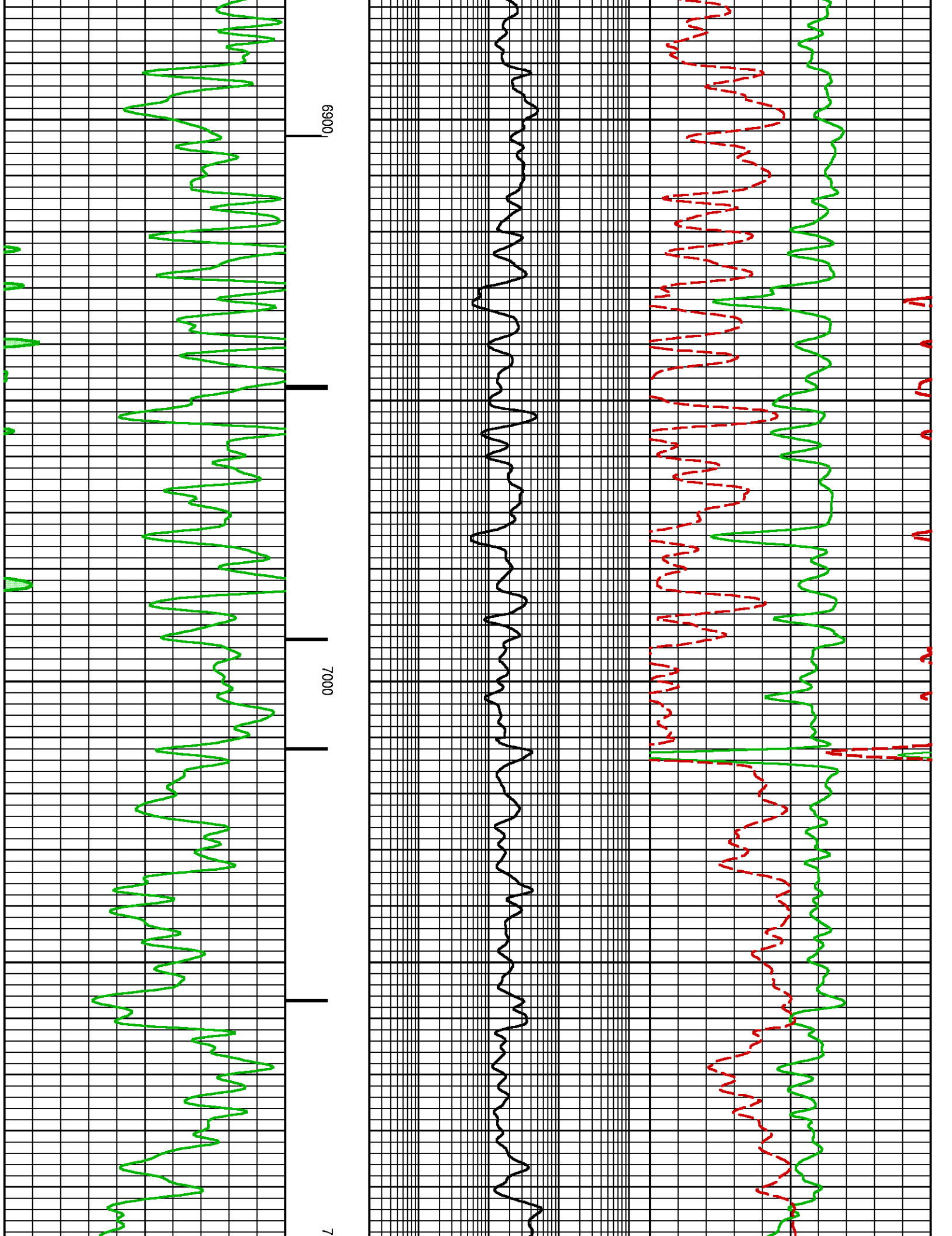


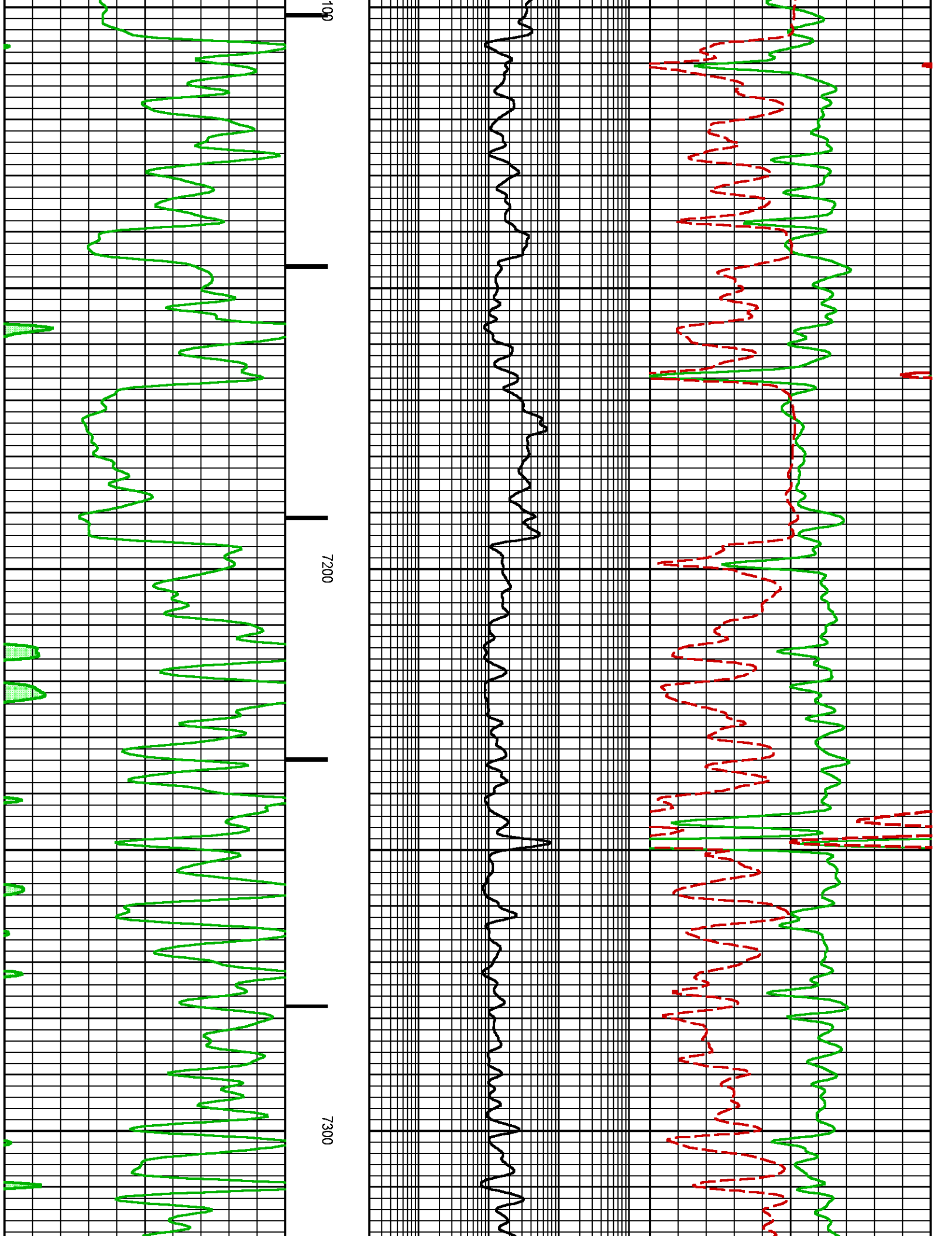


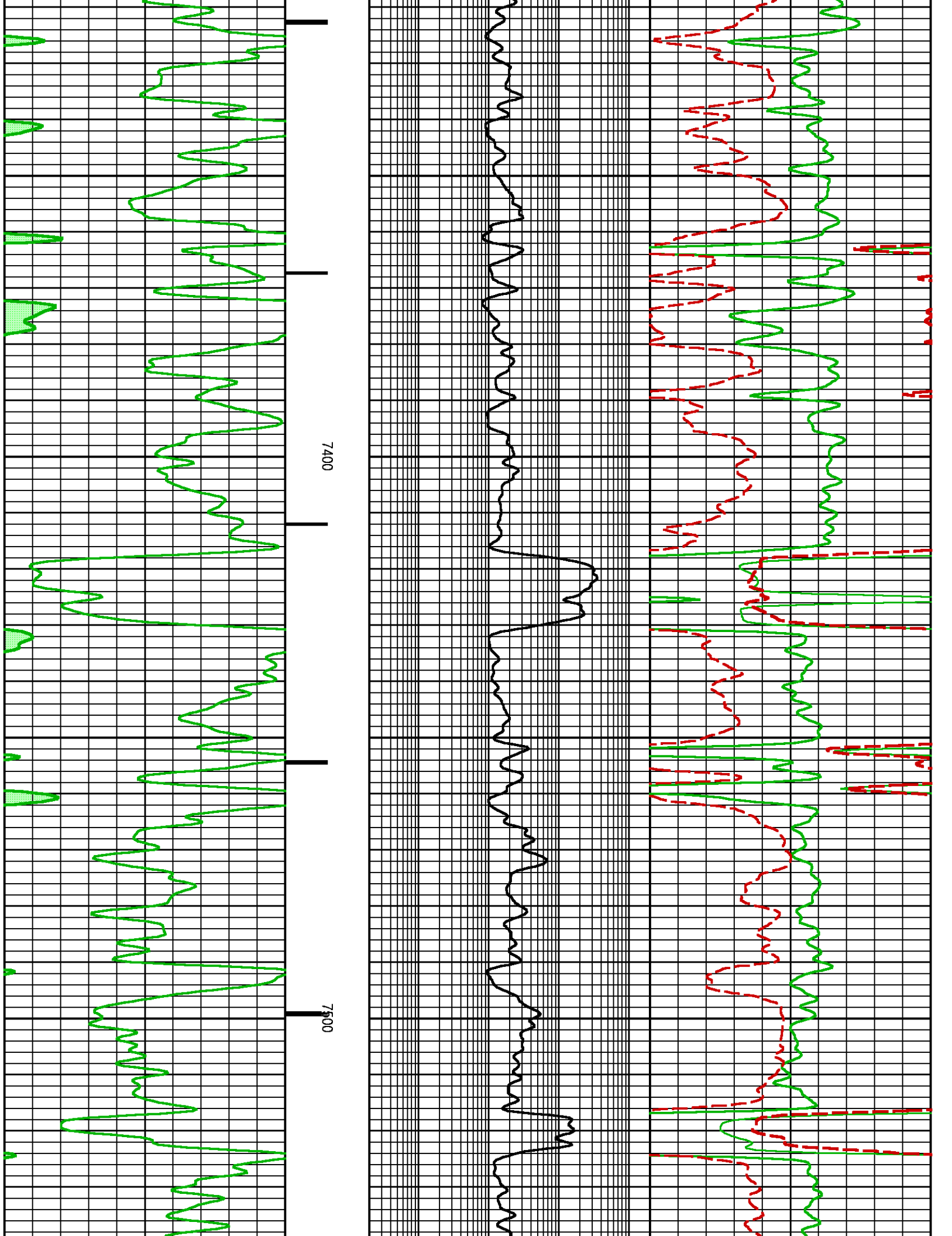


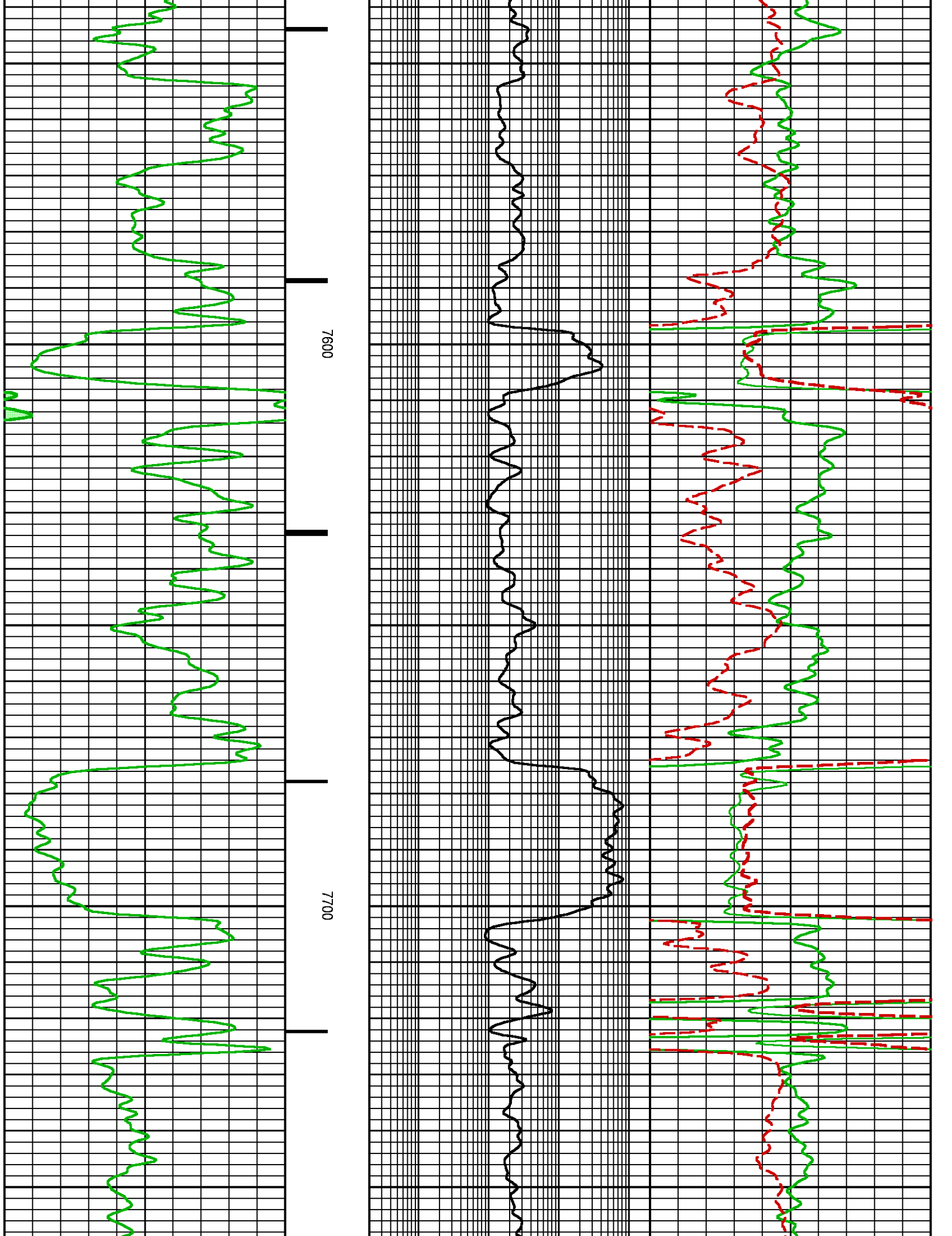


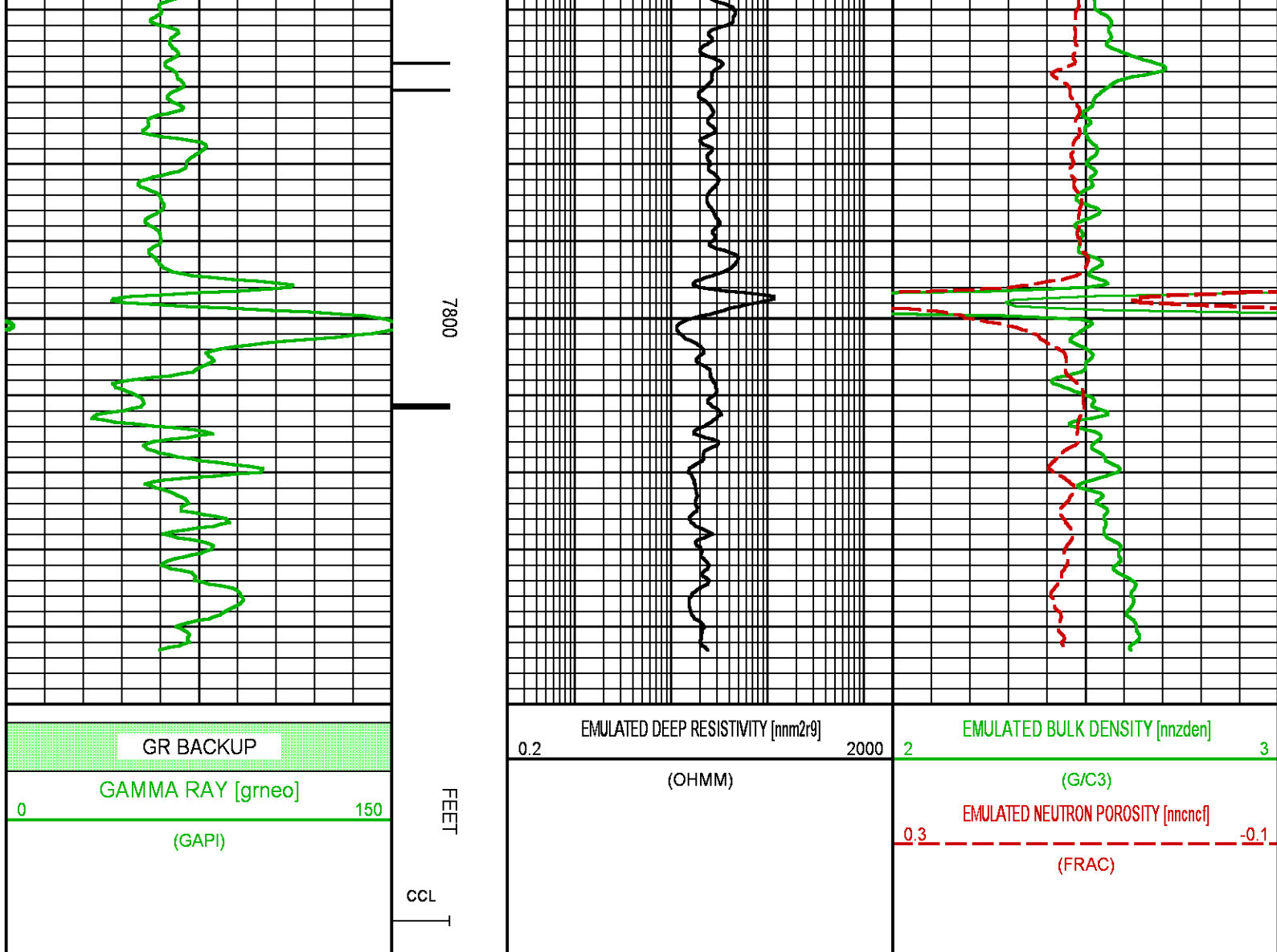



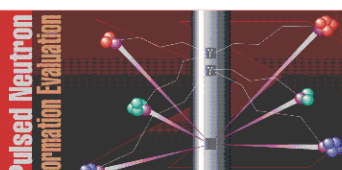










 	COMPANY <u>LARAMIE ENERGY</u> WELL <u>GUNDERSON BCU 20-07E</u> FIELD <u>VEGA</u> COUNTY <u>MESA</u> STATE <u>COLORADO</u>	FILE NO: <u>28178-01</u> API NO: <u>05077103570000</u>
	LOCATION: <u>SEE REMARKS SECTION</u>	ELEVATIONS: KB <u>7176.0 FT</u> DF <u>7175.0 FT</u> GL <u>7146.0 FT</u>
SEC <u>20</u> TWP <u>9S</u> RGE <u>93W</u>	DATE <u>27-AUG-2017</u>	